



● Please Join Our Automatic E-mail Notification System

Since we have had great success with the efficiency of our list server for distributing this newsletter and other information to our customers, we have decided to repeat our previous article to encourage our readers to take advantage of this technology. The electrical fund cannot support the financial costs associated with distributing mailings to all of our contractors, administrators, electricians, trainees, and other industry stakeholders. It is our responsibility to use your electrical fund wisely.

The electrical program has a one-way newsgroup (*Electrical News Announcements*) that allows all electrical stakeholders to receive automatic e-mail notification of events and issues. We now have the ability to include attachments (usually in Adobe .PDF format) and hyperlinks in these e-mail notices. We are using this service extensively for sending out the *ELECTRICAL CURRENTS* newsletter, and links to current versions of the electrical RCW and WAC, policy updates, stakeholder meeting announcements and other pertinent information from the Electrical Program. This is the fastest and easiest way for our electrical construction industry stakeholders to receive important current information from us.

New users should go to <http://listserv.wa.gov/archives/electrical.html> and click on “**join or leave the list (or change settings)**”, then fill in your e-mail address and name. This procedure changed in March 2001 when the list server was upgraded. If you subscribed previously and have **not** received any messages, please go to this website and either modify your information or subscribe again.

● Stakeholder Meetings Will Be In The Fall This Year

Stakeholder meetings will begin this year in September and will be completed by January 2002. Meeting dates and times will be posted on our website, e-mailed from the list server, and announced in this newsletter. You may also contact your local Electrical Inspection Field Supervisor to find out when a meeting will be held in your area. Don't miss this opportunity to be informed about legislation, rules, and technical issues. We will continue to sponsor take-home examinations good for 4 continuing education units (CEU's) for individuals that attend and get a score of 70 or better on the exam. It is also a time to voice concerns you may have about the electrical program. Please take the time to attend one of these worthwhile meetings.

● Service or Other Masts

As a result of the WAC stakeholdering process a significant change was made to WAC 296-46A-23028. Conduit that extends through a roof and is intended to support overhead drops for service, feeder, or branch circuits may be reduced from the previous 2-inch rigid steel conduit minimum to 1¼-inch rigid steel conduit minimum when supporting conductors not exceeding #1 AWG aluminum or #3 AWG copper. Overhead drops exceeding these conductor sizes are still required to be supported by 2-inch or larger rigid metal conduit.

Conduit used for support of overhead drops must be installed with the methods shown in drawings E-101 through E-103 (and the notes to the drawings) in WAC 296-46A-23028. The inspector may approve alternate methods (to the exact details in the drawings) if they provide equivalent support for the mast. No conductors other than the service laterals are allowed to be supported from the service mast or any service conductors.

● Swimming Pool Inspections

The department has recently received several inquiries about how electrical inspections are performed on residential swimming pools. The following is intended to give our customers a general description of what to expect when they have purchased a permit for a swimming pool electrical inspection. These

installations will normally require two inspection visits by the inspector. **It is important to note that this article is not intended to replace your study of NEC Article 680—Swimming pools, Fountains, and Similar Installations before performing any electrical installation for a swimming pool.**

On the first inspection the inspector will check the bonding of all metal pool parts using a #8 or larger solid copper conductor as required by NEC 680-22. Here are some examples:

- Diving boards, ladders, drains, reinforcing steel, and pool cover equipment.
- Metal fences, doors, gutters, window frames, and similar components located within 5 feet horizontally of the inside walls of the pool.
- The exterior bonding termination on a wet-, dry-, or no-niche lighting fixture forming shell.
- Metal pool walls or other structural framing.
- Conduit extending from the forming shell to a deck box.
- An insulated #8 equipment grounding conductor within the raceway between the wet-niche fixture forming shell and the listed swimming pool junction box.
- A listed potting compound encapsulating the equipment ground connection to the inside of the wet-niche fixture forming shell. (Installer should leave the potting compound packaging on site for listing verification.)

If all of the above items are not completed on the first inspection and an additional inspection for cover is required, additional inspection trip fees may be required.

The next inspection is normally the final inspection. This inspection is not limited to, but will include all of the following items:

- Inspection of the pool panel and feeder (ground rods, main breaker retaining clip, grounds and neutrals separated, etc.).
- Verification that the pool bonding conductor is properly terminated on all the pool equipment.
- Ditch inspection of conduits not completed on previous inspection trips.
- Check pool lighting fixture junction boxes to ensure proper equipment grounding conductor terminations and make sure the fixture cord is secured by cable strain relief clamp in the junction box.
- Inspect circuits for insulated equipment grounding conductor, GFCI protection, and proper separation of low voltage and GFCI circuits from line voltage other circuits.
- Verify that a 120-volt 15- or 20-amp GFCI protected receptacle outlet is installed a minimum of 10 feet but not more than 20 feet from the inside wall of the pool.

● **Electrical Inspection Fee Due Collection**

A recent audit of the outstanding fees due to the department revealed electrical contractors are not being prompt with payment. An electrical fee due notice is an electrical correction. RCW 19.28.101 requires electrical corrections to be made within 15 days. RCW 19.28.161 requires the administrator of an electrical contracting firm to “ensure that all electrical work complies with the electrical installation laws and rules of the state.” To avoid a citation and the associated civil penalty, the administrator must ensure that the appropriate fees itemized in the fee due notice are paid within the 15-day time frame.

● **Code Question of the Month**

This month’s Code Question: (General Rule) The minimum horizontal separation from buried underground wiring and the inside wall of a pool is? A) 1 foot, B) 3 feet, C) 5 feet, D) No separation required.

Last month’s Code Question: Which of the following can be utilized for the bonding of service equipment? A) Green screw, B) Wire, C) Bus, D) All of the above. **The answer is: D) All of the above.** [NEC 250-94; NEC 250-8; NEC 250-102]